UNIT 11: USE OF PSYCHOLOGICAL TESTS IN GUIDANCE AND COUNSELLING

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11.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- elucidate the meaning of psychological tests.
- identify the different types of psychological tests.
- describe the concept of intelligence tests.
- discuss verbal, non-verbal and performance intelligence tests with their advantages and disadvantages.
- describe the importance of intelligence tests in guidance and counselling.

11.2 INTRODUCTION

We have already mentioned that measurement, standardization, and evaluation are closely connected with every area of our daily life. In this unit, we will become familiar with psychological tests as tools of psychological measurement.

Intelligence is one of the main sources of individual differences. It is a relatively stable quality of a person and controls and guides all mental and physical activities. Therefore, intelligence is reflected in all human behavior. For this reason, measuring intelligence is very important in the process of guidance and counselling.

Today, many standardized intelligence tests are used in psychology. In fact, psychological testing started with intelligence testing. In this unit, we will discuss intelligence tests used for measuring intelligence.

11.3 MEANING AND DEFINITIONS OF PSYCHOLOGICAL TEST

Psychological tests are measuring tools. Due to new research and studies in psychology and education, these tests have been developed as measurement tools.

According to modern views, all human traits, behaviors, and abilities can be measured objectively and accurately with the help of psychological tests. These tests have made the measurement process more scientific in psychology and education.

Different psychologists have defined psychological tests in different ways:

- **Freeman:** A psychological test is a standardized instrument designed to measure objectively one or more aspects of personality through verbal or non-verbal responses.

- **Anastasi:** A psychological test is an objective and standardized measure of a sample of behavior.
- **Cronbach:** A psychological test is a systematic procedure for comparing the behavior of two or more persons.
- **Marshall:** A psychological test is a set of selected and organized stimuli that produce responses revealing mental characteristics of the person.

From these definitions, we can say:

- A psychological test is a measuring technique.
- It follows a systematic and standardized method.
- Mental traits can only be measured when they are expressed through behavior.
- Test items are selected according to the purpose of the test.
- Tests measure selected samples of behavior.

Tests are named according to what they measure, such as intelligence test, personality test, interest test, etc.

w CHECK YOUR PROGRESS

Q1: What is a psychological test?

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Q2: Fill in the blanks:

(a) An objective and standardized measure of behavior is called _____.

(b) Psychological tests are a set of _____.

11.4 TYPES OF PSYCHOLOGICAL TESTS

Although the measurement movement in psychology began with intelligence tests, at present many types of psychological tests are used to measure different mental traits in various fields. Psychological tests are classified into different categories based on purpose, content, method of administration, and other aspects. The different classifications of tests are mentioned below:

1] **Classification based on behavioral traits** such as – intelligence tests, aptitude tests, personality tests, achievement tests, interest tests, attitude tests, creativity tests, etc.

2] **Classification based on method of administration** – such as individual tests and group tests.

3] **Classification based on the nature of test items** such as – verbal tests, non-verbal tests, and performance tests.

4] **Speed tests and power tests.**

11.4.1 Classification based on method of administration

According to the nature of the field of application, psychological tests are divided into two categories:

1] Individual Test

2] Group Test

Below, these two types of tests are discussed.

11.4.1.1 Individual Test

Tests that are administered separately to one person at a time are called **individual tests**.These tests are used once to measure a specific trait of a person. That means the administration of these tests is person-centered. The Stanford-Binet Test and the Wechsler Intelligence Test are examples of individual psychological tests.

Merits of Individual Test

Individual tests have some special advantages. With the help of these tests, the real nature of a person's mental traits can be measured. These tests are more acceptable and reliable than group tests. The advantages are given below:

- The scores obtained through individual administration are more accurate.
- A close relationship is established between the examiner and the examinee.
- The examiner can give personal attention to the behavior of the examinee. As a result, it becomes possible to observe different aspects of the examinee's behavior.
- Through these tests, some hidden aspects of the examinee's behavior can also be understood.

Demerits of Individual Test

Although individual tests have many advantages, they are not completely free from limitations. The main disadvantages are mentioned below:

- The main disadvantage is that these tests require more time to administer. Therefore, they are more difficult to conduct.
- The examiner needs skill in establishing a relationship with the examinee while administering these tests.
- It may be difficult to successfully administer these tests to highly introverted or shy examinees.
- The conditions of administration may not be the same in all situations.

11.4.1.2 Group Test

In contrast to individual tests, the tests that can be administered to many persons at the same time in a group are called **group tests**. In these tests, the specific traits of many examinees are measured together. In other words, the tests through which the intelligence of many persons can be measured at the same time by one examiner are called group intelligence tests. Basically, group tests were developed as an alternative to individual tests.During the First World War, these group tests were first developed in the United States Army for recruiting a large number of people. Under the leadership of T. T. Yerkes, President of the American Psychological Association at that time, two such tests were prepared. These were:

- Army Alpha Test
- Army Beta Test

Later, many similar tests were developed following these models.

Group tests are prepared by considering mental traits as general mental abilities, and importance is given to group characteristics. The method of administering these tests is simple.

Merits and Demerits of Group Tests

In general, group tests were developed as an economical alternative to remove the difficulties found in individual tests. The main advantages of group tests are:

- The mental traits of many persons can be measured within a short time.

- These tests are provided in printed form. The examiner does not need to establish personal contact with each examinee. Therefore, the examiner's effort is reduced.
- Special skill is not required for administering these tests.
- Since they are given in groups, the conditions during test administration affect all examinees equally.
- The scoring system of these tests is mostly free from the personal influence of the examiner and is simple.

However, although group tests have advantages, they also have some disadvantages. These are:

- The examiner does not have the opportunity to establish the necessary personal relationship with examinees to gain their cooperation.
- In group tests, the examiner cannot understand the personal problems of examinees during test administration. Therefore, it is not possible to control the testing environment according to individual needs.
- Not all examinees are equally able to follow group instructions. As a result, the reliability of the scores obtained is generally lower.
- The questions used in these tests are mostly general in nature. The individual abilities of all examinees are not specially considered.

Despite these disadvantages, group tests are widely used in different fields. In education, they are especially useful for measuring the intelligence of many students. However, when it is necessary to examine the evaluation problems of particular students separately, individual tests should be used.In this context, Rorschach's comment is noteworthy:

"It is possible to apply these (group) tests and get preliminary results at least in a short time, but we are warned that the only safe and sure method is that of the individual test."Therefore, in terms of usefulness, effectiveness, and other qualities, individual tests are generally more acceptable than group tests.

CHECK YOUR PROGRESS

Q No. 3: Write the types of psychological tests based on the method of administration.

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Q No. 4: Write two disadvantages of individual tests.

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Q No. 5: Write two advantages of group tests.

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Q No. 6: Mention two differences between group tests and individual tests.

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11.4.2 Classification based on test items

Psychological tests are also classified on the basis of the nature of the test items used in them. According to this classification, the types of tests are:

(a) Verbal Test

(b) Non-Verbal Test

(c) Performance Test

11.4.2.1 Verbal Test

Tests in which the examinee has to use language ability and respond either orally or in written form are called **verbal tests**. In these tests, the questions are language-based. Therefore, the examinee uses language to respond to the items. In this type of test, the examiner gives instructions either orally, in written form, or both. Similarly, the examinees give their responses verbally or in written form. It is important to note that the examinee must have proper knowledge of the language used in the test. Therefore, these tests can be administered only to literate persons. These tests can be given both individually and in groups. Language is an excellent medium for expressing a person's different mental traits. Hence, verbal tests are important tools for measuring mental characteristics.

However, since these tests are language-based, their accuracy and reliability are sometimes doubtful. In many cases, instead of measuring the actual mental traits, these tests may give more importance to language ability.

11.4.2.2 Non-verbal Test

The attempt to construct tests for measuring mental traits was inspired by Binet's intelligence test. This test was verbal or language-based. Following it, many other tests were developed. However, many psychologists strongly criticized the language-based nature of Binet's test.

These verbal tests cannot be used with people who have language difficulties. Therefore, psychologists felt the need for an alternative to verbal tests. As an alternative method, different shapes, designs, picture sequences, etc., are used. In these tests, the examinee has to perform tasks such as drawing figures, matching sequences, preparing designs, and similar activities.

Although language may be used to give instructions in these tests, the examinee does not use language to give responses. However, the examinee uses paper and pencil to respond. Raven's Progressive Matrices, Chicago Non-Verbal Test, and Army Beta Test are examples of non-verbal tests.

11.4.2.3 Performance Test

Performance tests are actually non-verbal tests. In these tests, the examinee solves problems by using concrete materials. The problems generally used in these tests include: completing pictures, arranging one picture by looking at another, making designs with blocks, arranging blocks of different shapes on a wooden board, finding a path through a maze, matching numbers and symbols, etc. In these tests, the examiner gives instructions through gestures or signs.

In practice, however, the difference between paper-pencil non-verbal tests and performance tests is not very clear. Many paper-pencil non-verbal tests require the use of concrete materials. On the other hand, some performance tests may also use paper and pencil. Therefore, at present, the term performance test generally includes both concrete and picture-based non-verbal tests. In other words, non-verbal tests are now commonly referred to as performance tests.

Thus, tests in which the scores are influenced by the examinee's work skill and not by verbal skill are called performance tests. In short, tests that produce motor or manual responses from the examinee are called performance tests.

From the point of view of characteristics:

- In performance tests, specific tasks are used as test items.
- Usually, problems are solved by using concrete objects or picture-based activities.
- The examiner gives instructions either through language or gestures, but the examinee does not use language to give responses.

Uses of Performance Tests

Performance tests were mainly developed as alternatives to verbal tests. Their main uses are:

- They are used to measure the mental traits of examinees who have low language ability or who are mute or deaf.
- They help in understanding the practical knowledge of the examinee. The active aspect of intelligence is expressed through these tests.
- They help in understanding the mental organization of the examinee. Certain mental illnesses may affect the way a person performs tasks. By observing the nature of task performance, the examiner can understand the mental organization of the examinee.
- They can measure concrete intelligence.
- They can be used with children who have intellectual disability or low intelligence.

Although performance tests were developed as alternatives to verbal tests, they cannot measure intelligence as effectively as verbal tests. Research has shown that the correlation between verbal test results and performance test results is very low.

From various analyses, psychologists have expressed the view that these tests mainly measure:

- Spatial ability
- Muscular movement
- Sensory-motor coordination
- Speed of reaction
- Because they measure these limited abilities, they cannot fully measure general mental ability.

- In performance tests, special importance is given to speed of response. Therefore, the obtained scores are influenced by speed.
- These tests are not very effective in measuring the intelligence of adults.

Even so, if used carefully and as a supplementary technique along with other measurement methods, performance tests can provide important information about the intelligence of an examinee.At present, many standardized performance tests are used for mental measurement. Some of these are administered individually and some in groups. Many types of performance tests have been developed throughout the world to measure intellectual ability. Examples include:

- Alexander Passalong Test
- Kohs Block Design Test
- Knox Cube Construction Test
- Healy Puzzle Test

In India also, psychologists have developed different types of performance tests. One important example is the **Bhatia Performance Test**.

CHECK YOUR PROGRESS

Q No. 7: Fill in the blanks –

(a) The test in which the examinee responds with the help of language ability is called a _____ test.

(b) The tests in which paper and pencil are used without taking the help of language are called _____ tests.

(c) In performance tests, the examinee shows responses through _____.

Q No. 8: Mention two advantages of performance tests.

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Q No. 9: Give one example each of verbal, non-verbal, and performance tests.

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11.5 USE OF PSYCHOLOGICAL TESTS IN GUIDANCE AND COUNSELLING

Psychological tests are used for different purposes in the process of guidance and counselling. Some important points are mentioned below:

- The counsellor uses psychological tests to collect information about the mental traits of the client, such as ability, potential, interest, attitude, personality, etc. These tests also help the client to develop self-understanding.
- Psychological tests are also used to determine the probable future success or efficiency of students or clients in educational or occupational fields. In other words, these tests are necessary to identify the hidden potentialities of a person.
- Mental tests are used to help the client in making educational or vocational plans. Based on the results of these tests, a person can know his or her strengths and weaknesses and prepare future educational and career plans accordingly.
- On the basis of the information obtained from these tests, the counsellor can identify different problematic behaviors of the individual and also determine ways to solve these problems.
- In the counselling process, psychological tests are generally administered both before and after counselling. By comparing the information obtained at these two stages, the counsellor evaluates the success or failure of the counselling process.

11.6Observation Method

The observation method is widely used to assess the qualitative aspects of behavior. In this method, importance is given to the real study of displayed behavior. Generally, observation means the process of collecting information about a subject or object through direct sense experience. In psychology, the external form of a person's behavior is the subject matter of observation.

In the observation method, the behavior of one person is watched by another person. That is, the behavior shown by an individual is directly observed in real-life

situations, analyzed, and its meaning is interpreted by another person. Based on the observation of external behavior, different conclusions are drawn about the behavior. In this method, behavior is studied in its natural form rather than in a controlled or artificial environment. The basic scientific principle behind this method is that a person's mental states are expressed through external behavior. Therefore, external behaviors reflect different mental conditions. For example, by looking at a person's facial expression, we can understand feelings such as anger, fear, anxiety, sadness, or irritation. This method is an indirect way of studying behavior. In the process of guidance and counselling, it is an important method for studying the behavior of the concerned individual. With the help of this method, many important pieces of information about a person's behavior can be collected. The counsellor observes each individual separately.

However, it is important to note that to be considered a scientific method, observation must be purposeful, systematic, and conducted by an experienced person. Only then can its validity, reliability, and objectivity be accepted. Unplanned and purposeless observation cannot be scientific. Therefore, a clear and pre-planned design is necessary for observation. First, the behavior to be observed must be clearly defined. The time limit, situation, and other related responses connected with the behavior must also be identified. If necessary, the observer should also know the general standards of the behavior being studied.

In the process of guidance and counselling, observation helps in many ways. At the initial stage, through observing behavior, the observer can understand the strengths and weaknesses of the person or student receiving counselling. On this basis, a plan for studying the individual is prepared and decisions are taken to solve the identified problems. In the educational setting, a teacher or guidance provider uses observation to evaluate the cognitive, emotional, and psychomotor development of students in a comprehensive way.

11.7 Interview Method

The interview method is used as a qualitative method for studying a person's behavior. It refers to the process of collecting information by meeting a person directly and having a conversation with them. In this method, a direct relationship is established between the examiner and the examinee.

The role of the psychologist or examiner is to ask certain questions to the individual or examinee. These questions are naturally goal-oriented. They are asked to understand specific aspects of a person's behavior. Mainly, interviews aim to study emotional feelings, thoughts, and other aspects related to behavior which cannot be directly observed. Therefore, the purpose of interviews is both introductory (to know the person) and evaluative (to assess the person).

In this method, a close relationship is developed between the interviewer and the individual. The environment of the interview should be simple and free. Generally, the interview process is completed in three stages:

- Establishing a friendly relationship with the person and explaining the purpose of the interview
- Collecting information
- Summarizing or concluding the information collected

11.8 Case History Method

The case history method, used for collecting information about a person's behavior, is mainly based on external observation techniques. Psychologists believe that while studying a person's behavior, it is necessary to consider it as a whole in relation to different environments and situations. Therefore, information should be collected from various areas of a person's life. It is not reasonable to judge a person's behavior only on the basis of a single immediate event. To give a more realistic and reliable explanation of behavior, it is important to carefully examine the different events of a person's past and present life.

Thus, the method of collecting information about a person by studying various life situations and events in detail, and then making a complete study of the person's behavior, is called the **case history method** or **life event study method**. This method mainly focuses on finding out the causes of problematic behavior. While studying behavior through this method, different kinds of tools and techniques are used. Therefore, it is considered an analytical and comprehensive method of collecting information.

In this method, information is mainly collected through indirect or external observation. It is generally used to find out the causes of mental illness and maladjusted behavior. For this reason, many people consider it a **clinical method**. However, it is also used to study the behavior of normal individuals. In the counselling process, the counsellor

uses this method to obtain organized and summarized information about a person's problem and, on that basis, tries to understand the real cause of the problem.

Main Characteristics of the Case History Method

- This method is related to the past, present, and future aspects of a person's life.
- It involves collecting and combining events related to different life situations and examining how these events are connected with the present problem.
- It collects different types of information about the person, such as physical condition, family or environmental condition, intellectual, emotional, educational, and economic aspects.
- Various tools and techniques are used to collect information. The collected data are analyzed and conclusions are drawn.
- Based on the decisions taken from the collected information, plans are prepared to solve the problems faced by the individual.

11.9 Sociometric Method

Most of a person's behavior is influenced by social factors. In other words, the people in the social environment in which a person lives have an important influence on his or her behavior. Therefore, by analyzing how a person forms social relationships in a particular social or group situation, we can understand the nature of that person's behavior. Based on this principle, the sociometric method or social relationship study method is used to assess a person's behavior. Social qualities such as sense of responsibility, social adjustment, leadership, etc., can be measured or evaluated through this method.

The sociometric method studies the mutual social acceptance or rejection among members of a group. It is a technique used to evaluate a person's social characteristics and the social structure of a group. In a specific group situation, this method determines the level of acceptance of a person within the group. By using this method, we can know how other group members feel about a particular person and how they accept him or her.

This method is very simple. Group members are asked questions about whom they like or dislike within the group, according to a specific purpose. Usually, members are asked to mention their first, second, and third choices in different social situations. For example:

- "With whom would you like to sit in the class or on the bus?"
- "Whom would you like to choose as the leader of your class? Mention three names."

In this method, positive questions are asked to measure preference, and negative questions are asked to measure rejection. However, experts suggest that negative questions should be avoided as far as possible. The number of choices should also be limited to first, second, and third preferences.

Based on the collected information about preferences and rejections in different social situations, a diagram called a **sociogram** is drawn. In this diagram, mutual relationships or choices are shown by lines. With the help of this diagram, we can identify which members are most liked and which are disliked in the group.

For example, in a sociogram of 10 students with two choices each, the diagram shows:

- One-way interaction
- Two-way interaction

Each student is asked to mention two classmates of their choice.

Based on the prepared sociogram, a list is made showing how many times each student was chosen. From this, we can identify the **"Star"** (the most liked person) and the **"Isolate"** (the least liked or rejected person). After identification, their personal characteristics are analyzed to understand the reasons for being liked or disliked.

Importance of the Sociometric Method

- It helps to understand the social adjustment qualities and nature of a person's behaviour.
- Based on the results, decisions can be taken to solve problems related to social adjustment and interpersonal relationships.
- The information obtained through this method gives a brief picture of the social structure of a group.

CHECK YOUR PROGRESS

Q No. 10: What is the study of social relationships or the sociometric method?

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Q No. 11: What is the diagram used in the sociometric method called?

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11.10 Measurement of Intelligence Tests

After understanding the definition and nature of intelligence, a natural question arises—how can this mental ability be measured? We see that psychologists have many differences of opinion about the definition and nature of intelligence. However, there is less disagreement among them regarding its measurement.

Earlier thinkers believed that there was a fixed relationship between intelligence and physical structure. Therefore, they thought intelligence could be measured by relating it to different parts of the body. Based on this idea, different theories developed, such as:

- Phrenology – It claimed that intelligence is related to the shape and size of the skull.
- Physiognomy – According to this idea, intelligence could be judged by looking at a person's facial features.
- Graphology – It tried to measure intelligence by analyzing a person's handwriting.

The main weakness of these methods was that they could not scientifically explain the real relationship between physical features and mental ability. They were based only on assumptions.

By the end of the nineteenth century, psychology developed as an experimental science. From then on, psychologists became especially interested in measuring intelligence scientifically. At the early stage, psychologists like Cattell tried to measure intelligence by measuring simple sensory responses. However, this method is not considered scientific today and is no longer used to measure intelligence.

Modern psychologists believe that although intelligence is an abstract concept, it is measurable. To explain this, psychologist Wechsler compared intelligence to electricity. We cannot see electricity directly, but we understand its existence through the work it performs, and we can measure it accurately. In the same way, although intelligence has no physical form, it can be measured through a person's intelligent behavior.

It is important to note that, unlike physical measurements, intelligence cannot be

measured directly in its pure form. In intelligence testing, intelligence is understood from the tasks performed by a person. That is why it is said:

"Intelligence is what an intelligence test measures."

In modern psychology, many scientific methods have been developed to measure intelligence more reliably. The method currently used to measure intelligence is called an intelligence test. In psychology, a test means a set of stimuli designed to produce specific mental responses. Therefore, an intelligence test is a set of stimuli that produces responses showing a person's intelligence. In other words, an intelligence test is a group of tasks or questions that create responses indicating intelligence.

In brief, an intelligence test can be described as follows:

- It is a set of stimuli that produce responses indicating intelligence.
- Intelligence is measured through higher mental abilities rather than simple sensory or motor responses.
- Intelligence is a combination of different mental abilities; therefore, intelligence tests include different types of questions to measure various mental abilities.
- Although intelligence is measured in terms of different mental abilities, these abilities are not considered separately; instead, a single overall intelligence score is determined.
- Intelligence scores are determined based on the level of performance of the individual.
- Solving intelligence test questions does not require previously acquired knowledge.

w CHECK YOUR PROGRESS

Q No. 12: What is an intelligence test?

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Q No. 13: Write two characteristics of an intelligence test.

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11.11 Verbal, Non-verbal and Performance Tests of Intelligence

Based on the nature of the questions used in intelligence tests, they can mainly be divided into two categories:

1. **Verbal Tests**
2. **Non-Verbal Tests**

Below is a brief discussion of these two types of tests.

11.11.1 Verbal Test

In some intelligence tests, the questions are language-based. That means intelligence is measured through a person's verbal responses. In these tests, the individual has to solve the questions or problems either in written or oral form. Such tests are called verbal or language-based intelligence tests.

In these tests, reading, writing, or speaking is used as the medium of response. Therefore, the test-taker needs language skills. The examiner also gives instructions either in written or oral form, or in both.

Advantages and Disadvantages of Verbal Intelligence Tests

There are several advantages and disadvantages in using verbal intelligence tests. These are mentioned below:

Advantages of Verbal Intelligence Tests:

1. Verbal intelligence tests are considered more valid and reliable because language is the best medium for expressing a person's individuality. In these tests, the person gets the opportunity to respond through language.
2. Based on the written or oral responses given through language, intelligence can be measured more objectively.

Disadvantages of Verbal Intelligence Tests:

1. In many cases, the reliability and validity of these tests are doubtful.
2. The scores in these tests depend on the person's language ability.
3. Since they are language-based, they are not suitable for individuals with weak language skills.
4. These tests cannot be properly given to people with language difficulties or disabilities, illiterate persons, children, or those unfamiliar with the test language.

5. Experienced examiners are required to conduct these tests.
6. These tests are more expensive.

11.11.2 Non-verbal and Performance Test

We have already mentioned that in different countries of the world, efforts to construct intelligence tests were inspired by the work of Binet, and many tests were developed following his model. However, many psychologists strongly criticized the language-based tendency of Binet's tests. These tests cannot be applied to people who have language weaknesses. On the other hand, it is seen that a person's intelligence is expressed through various activities. Therefore, as an alternative, psychologists developed another type of intelligence test known as non-verbal or performance tests.

In these tests, some practical problems are selected as test items. Generally, the examinees have to perform certain specific tasks. Marks are given on the basis of their performance in completing these tasks. Psychologists divided non-verbal tests into two categories:

(1) Pictorial or paper-pencil non-verbal tests and

(2) Performance tests.

In the first type of test, there are activities like drawing pictures on paper, writing numbers, drawing graphs, etc. Although the examiner uses language to give instructions, the examinee does not use language to answer. In the second type, that is, performance tests, the examinee uses concrete materials to solve a problem. The commonly used tasks in these tests include: completing pictures, arranging one picture after seeing another, making designs with blocks, arranging different shaped blocks on a wooden board, finding a path in a maze, number-symbol tasks, etc. In these tests, the examiner gives instructions through gestures and demonstrations.

In practice, however, the boundary between paper-pencil non-verbal tests and performance tests is not very clear. Many paper-pencil non-verbal tests require the use of concrete materials. On the other hand, in performance tests, paper and pencil may not be required. Therefore, nowadays both concrete and pictorial language-free tests are generally called performance tests. In other words, language-free tests are known as performance tests. Thus, those tests in which

the obtained scores are not influenced by the examinee's verbal ability but only by overt performance skill are called performance tests. In short, tests that evoke motor or manual responses in individuals are called performance tests.

From the point of view of general characteristics:

1. In performance tests, specific tasks are used as test items.
2. Generally, problems are solved by using concrete objects or with the help of pictorial activities.
3. The examiner gives instructions either through language or through gestures, but the examinee does not use language while responding.

Uses of Performance Tests

Performance tests were mainly developed as alternatives to language-based tests. Their main uses are:

1. They are used to measure different mental characteristics of examinees who have poor language ability or who are deaf and mute.
2. By measuring intelligence through performance tests, we can understand the practical knowledge of the examinee. The active aspect of intelligence is revealed through these tests.
3. These tests help to understand the mental organization of the examinee. Certain mental illnesses affect the way a person performs specific tasks. By observing the nature of task performance, the examiner can understand the nature of the person's mental organization.
4. Performance tests can measure concrete intelligence.
5. These tests can be applied to children with low or dull intelligence.

Although performance tests were developed as alternatives to language-based tests, they cannot measure intelligence with the same adequacy as language-based tests. Research has shown that the correlation between results of language-based tests and performance tests is very low.

1. According to psychologists, these tests measure limited abilities such as:
   (a) Spatial ability
   (b) Muscular movement
   (c) Sensory-motor coordination
   (d) Speed of reactionand other similar abilities.

On the basis of these limited abilities, intelligence as a general mental power cannot be fully measured.

2. In performance tests, special importance is given to speed in responding. Therefore, the obtained scores are influenced by the factor of speed.
3. These tests are not very effective in measuring the intelligence of adults. However, if used along with other measurement techniques and with awareness of their limitations, performance tests can provide important information about an examinee's intelligence.

At present, many standardized tests of this type are used for measuring intelligence. Some of these tests are administered individually, while others are given in groups. Various types of performance tests have been developed throughout the world for measuring intellectual ability, such as: Alexander's Pass-Along Test, Koh's Block Design Test, Knox's Cube Construction Test, Healy's Puzzle Test, etc. In India also, psychologists have developed different types of performance tests. Among them, an important test is the Bhatia Performance Test.

11.12 IMPORTANCE OF INTELLIGENCE TESTS IN GUIDANCE AND COUNSELLING

A person's behaviour is greatly influenced by his or her level of intelligence. The concept of intelligence helps in taking many important decisions in the process of guidance and counselling. Intelligence tests have prognostic value (Psognostic value) because a person's intelligence or general mental ability determines the limit of his or her educational development. At the same time, these tests also have diagnostic value in many cases.

In education, guidance is necessary to help students receive educational facilities according to their individual characteristics and abilities. For providing such educational guidance, information about a student's mental ability is most important for a teacher. Therefore, the results of intelligence tests help in educational guidance.

Many times, individuals suffer from mental problems or disorders. In the same way, intelligence is considered an important factor behind many problematic behaviours. The results of intelligence tests are used for identifying such behaviours and for taking remedial measures.

However, it is important to mention that these tests have many limitations. It is often seen that when different intelligence tests are applied to the same student, different scores are obtained. In such cases, it becomes difficult to take a clear decision about the student's intelligence. Moreover, the intelligence tests currently used cannot measure intelligence purely as general mental ability independent of other special abilities of a person or student. The conditions under which the test is administered and various interest-related factors of the examinee also influence the scores of intelligence tests. Therefore, it cannot be said with certainty that these tests measure only general mental ability.

2 11.13 LET US SUM UP

- In the case of physical measurement, the measurement techniques or instruments used are familiar to all of us. Therefore, we do not feel the need to define them in a specific way. On the other hand, although psychological and educational tests are widely used today to measure the mental and educational characteristics of students, our familiarity with these tests is comparatively limited.
- In psychology, the measurement movement began with intelligence testing. At present, many types of psychological tests are used in different fields to measure various mental characteristics.
- In the life-history method, different events related to a person's past, present, and future are studied in order to find out the causes of problematic behaviour and to take decisions about its solution. In this method, information is collected from different sources by using different methods.
- Intelligence is an inborn special quality or ability of a person which is expressed through behaviour. Intelligence makes a person's physical and mental structure strong and effective and shapes individual abilities in a special way. The main source of individual differences is intelligence. In the process of guidance and counselling, different intelligence tests are used to measure intelligence. Like other physical measurements, intelligence cannot be measured directly and in a pure form.
- In intelligence tests, intelligence is measured on the basis of tasks performed with the help of intelligence. In this case, intelligence tests are a set of stimuli to which a person responds. Through the responses shown by the person to these stimuli, intelligence is expressed, and on that basis intelligence is measured.

- Psychologists made various attempts at different times to measure intelligence. However, the credit for constructing psychological tests on a scientific basis is given to the French psychologist Alfred Binet. With the help of his colleague Simon, he prepared the first intelligence test in 1905, known as the "Binet-Simon Scale." At Stanford University in America, Terman published an improved version of the Binet-Simon Scale in 1916. This Stanford version became a popular test for measuring intelligence. At present, many standardized tests are available for measuring intelligence.
- Intelligence tests are classified into different types on the basis of certain structural and practical characteristics. On the basis of the number of participants, tests are classified as individual tests and group or collective tests. On the basis of the nature of the test items used, they are classified as verbal tests, non-verbal tests, and performance tests.
- Intelligence tests are widely used in the process of guidance and counselling. In this field, these tests have prognostic and diagnostic roles. Mainly, these tests are used for identifying various problematic behaviours of individuals and for their treatment.

O 11.14 FURTHER READING

- *The Counselling Process and Strategies*, (2016), NCERT.
- *Guidance and Counselling*, (2006), IGNOU.
- Lutomia, G. Sikolia. L. (2002). *Guidance and Counselling in Schools and Colleges*, Uzima Publishing House.

K 11.15 ANSWERS TO CHECK YOUR PROGRESS

Answer to Question No. 1:

Psychological tests are measurement techniques used for the objective measurement of mental characteristics.

Answer to Question No. 2:

(a) Test

(b) Stimulus

Answer to Question No. 3:

Individual and group tests.

Answer to Question No. 4:

1. These tests require more time for administration.
2. Their use is inconvenient in the case of introvert individuals.

Answer to Question No. 5:

1. Through these tests, the specific mental characteristics of many individuals can be measured within a short time.
2. Group tests are provided in printed form. The examiner does not need to have personal contact with each examinee. Therefore, the labour of the examiner is reduced.

Answer to Question No. 6:

1. They can be administered to many individuals in a short time.
2. Their scoring is free from personal bias.

Answer to Question No. 7:

(a) Verbal
(b) Non-verbal
(c) Performance

Answer to Question No. 8:

1. Performance tests are used to measure various mental characteristics of examinees who have low language ability or who are deaf and mute.
2. Through performance tests, we can understand the practical knowledge of the examinee. The active aspect of intelligence is expressed through these tests.

Answer to Question No. 9:

(a) Tests in which the examinee has to respond orally or in writing by using verbal ability are called verbal or language tests.
(b) The effort to construct tests for measuring mental characteristics was inspired by Binet's intelligence test. This test was verbal or language-based. Following it, many tests were developed.
(c) Performance tests are actually non-verbal tests. In these tests, the examinee solves a problem by using concrete materials.

Answer to Question No. 10:

The study of social relationships or the sociometric method is a method used to study the mutual acceptance or rejection among members of a group and to understand the social adjustment of individuals and the social structure of the group.

Answer to Question No. 11:

Sociogram.

Answer to Question No. 12:

An intelligence test refers to a set of stimuli through which a person's intelligence is expressed by the responses given to those stimuli.

Answer to Question No. 13:

(a) An intelligence test is a set of stimuli that produce responses which indicate intelligence.

(b) The test items of an intelligence test do not require previously acquired knowledge for their solution.

11.16 MODEL QUESTIONS

Q 1: Explain the meaning of psychological test.

Q 2: What is an individual test? Describe its advantages and disadvantages.

Q 3: Write a note on group test.

Q 4: Discuss the different types of tests based on test items.

Q 5: Discuss the use of psychological tests in the counselling process.

Q 6: What is the observation method? Discuss its advantages and disadvantages.

Q 7: What is an interview? Discuss the different types of interview methods.

Q 8: What is the case study method? Mention its characteristics.

Q 9: What is an intelligence test? Explain

Q10: Show your familiarity with individual and group intelligence tests.

Q 11: Discuss verbal and non-verbal intelligence tests.

Q 12: What is a performance test? Give a brief description of performance tests.

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